

**ABSTRACT**

The invention relates to a device for the partial crystallisation of a phase in a solution, comprising at least one pump (1) for circulation of the solution in a circuit (20) of a heat exchanger (2) formed from at least one tube (200) in contact with a cooling circuit (22), characterised in that the circuit (20) of the exchanger (2) includes static means to mix the solution, so that the crystallised particles of the phase are continuously mixed with the solution during the circulation of said solution.

The invention also relates to an assembly including several devices according to the invention or several parts of such a device.

The invention also relates to a method to use such a device.